

RECOVERY OUTLINE

Grey Petrel

1	Family	Procellariidae
2	Scientific name	<i>Procellaria cinerea</i> Gmelin, 1789
3	Common name	Grey Petrel
4	Conservation status	
	Australian breeding population	Endangered: D
	Population visiting Australian territory	Near Threatened: c

5 Reasons for listing

The only Australian breeding population, on Macquarie I., was thought extinct, and though it may be in the process of recolonisation, it certainly contains fewer than 50 individuals (so could be Critically Endangered: D). Attempts at recolonisation imply genetic exchange, so the Australian status is downgraded to Endangered: D (as per Gärdenfors *et al.*, 1999). The population visiting Australian waters is probably decreasing as a result of fishing bycatch and is classified as Near Threatened: c.

Australian breeding colonies	Estimate	Reliability
Extent of occurrence	5,000,000 km ²	medium
trend	stable	high
Area of occupancy	10 km ²	low
trend	stable	low
No. of breeding birds	10	low
trend	decreasing	medium
No. of sub-populations	1	high
Generation time	15 years	low
Global population share	< 1 %	high
Level of genetic exchange	high	medium

6 Intraspecific taxa

None described.

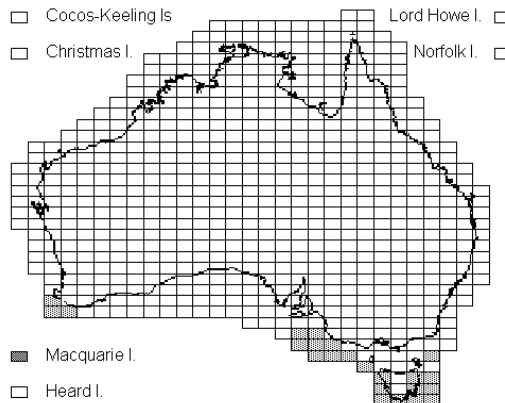
7 Past range and abundance

Within Australian territory, breeding on Macquarie I. (Keith and Hines, 1958, Jones, 1980). Also breeding on subantarctic islands in Pacific, Indian and Atlantic Oceans (Marchant and Higgins, 1990). Breeding birds probably forage around breeding islands, but movements poorly known. Non-breeding birds forage throughout Southern Ocean, and up east and west coasts of South America to at least 30°S, although scarce near Australian mainland (Marchant and Higgins, 1990). Global population probably exceeds 200,000 (Marchant and Higgins, 1990).

8 Present range and abundance

No breeding records from 1960s to 1993 (Brothers, 1984, Rounsevell and Brothers, 1984). However, two dead birds found in burrows in 1993 (N. Brothers)

suggests recolonisation by birds from other colonies, or undetected persistence of a small breeding population. Breeding confirmed in May 2000, when 8 eggs and 4 young found (G. Copson). Breeding colony on Cochon I. in the Crozet Is extinct (Jouventin *et al.*, 1984, Marchant and Higgins, 1990). Otherwise, distribution as above.



9 Ecology

Grey Petrels nest in burrows in colonies (Marchant and Higgins, 1990). They forage in subantarctic waters, taking pelagic cephalopods, fish and crustacea (Marchant and Higgins, 1990).

10 Threats

In New Zealand waters, Grey Petrels are being ensnared then drowned by longline fishing gear at a rate similar to albatrosses (Brothers *et al.*, 1998a,b). On land predation by cats and Wekas *Gallirallus australis* is held responsible for the temporary extinction of the small breeding colony of Grey Petrels on Macquarie I. (Brothers, 1984, Rounsevell and Brothers, 1984). Breeding attempts recorded recently may be a consequence of successful predator control. High levels of predation have also been experienced by colonies in Crozet Is, Prince Edward I. and Campbell I. (Marchant and Higgins, 1990).

11 Information required

None.

12 Recovery objectives

12.1 Reduce at-sea threats to acceptable levels.

- 12.2 Obtain global agreement on conservation measures required.
- 12.3 Promote public awareness of the conservation needs of seabirds.
- 13 Actions completed or under way
- 13.1 A Threat Abatement Plan (TAP) to minimise fishing bycatch has been prepared (EABG, 1998).
- 13.2 Effective mitigation techniques have been developed and are being improved.
- 13.3 Bycatch rates in the AFZ and the success of mitigation measures are monitored and the results quickly analysed.
- 13.4 Measures known to be effective in mitigating seabird bycatch within the AFZ are promoted by legislation, a code of practice and education programs.
- 14 Management actions required
- 14.1 Manage the recovery process with a Recovery Team.

15 Organisations responsible for conservation
Environment Australia.

16 Other organisations involved
Antarctic Science Advisory Committee, Australian Department of Foreign Affairs and Trade, Australian Agriculture, Fisheries and Forestry - Australia, Australian Fisheries Management Authority, Convention for Conservation of Migratory Species of Wild Animals, Ecologically Related Species Working Group of the Commission for the Conservation of Southern Bluefin Tuna, Food and Agricultural Organization of the United Nations and its Committee on Fisheries, Incidental Mortality Arising from Longline Fishing – ad hoc Working Group of the Working Group on Fish Stock Assessment of Convention for the Conservation of Antarctic Marine Living Resources, Tasmanian Fisheries Service, professional fishing industry groups.

17 Staff and financial resources required for recovery to be carried out

<i>Staff resources required 2001-2005</i>	1.0	<i>Project Officer (international liaison)¹</i>
	1.0	<i>Extension Officer¹</i>
	3.0	<i>Technical Officers (fisheries observers)¹</i>
<i>Financial resources required 2001-2005</i>		

<i>Action</i>	<i>Conservation agencies</i>	<i>Other funding sources</i>	<i>Total</i>
<i>Develop improved fishing bycatch mitigation¹</i>	\$10,500	\$10,500	\$21,000
<i>Monitor bycatch rates in the AFZ and success of mitigation measures¹</i>	\$3,600	\$8,600	\$12,200
<i>Analysis of annual bycatch data¹</i>	\$8,300	\$0	\$8,300
<i>Educate fishers in the AFZ in mitigation techniques¹</i>	\$6,300	\$5,400	\$11,700
<i>Inform national fora about the TAP¹</i>	\$2,300	\$0	\$2,300
<i>Inform international fora about the TAP and pursue international threat abatement¹</i>	\$3,900	\$0	\$3,900
<i>Maintain currency of TAP and report annually¹</i>	\$2,100	\$0	\$2,100
<i>Managing recovery process¹</i>	\$4,600	\$1,800	\$6,400
<i>Total</i>	\$41,600	\$26,300	\$67,900

¹ Costs for TAP actions divided amongst all 20 albatrosses, 2 giant-petrels, White-chinned Petrel and Grey Petrel

18 Bibliography

Brothers, N. P. 1984. Breeding distribution and status of burrow-nesting petrels at Macquarie Island. *Aust. Wildl. Res.* 11:113-131.

Brothers, N., Gales, R. and Reid, T. 1998a. Seabird interactions with longline fishing in the AFZ: seabird mortality estimates and 1988-1996 trends. Wildlife Report 98/1, Parks and Wildlife Service, Tasmania.

Brothers, N., Gales, R. and Reid, T. 1998b. Seabird interactions with longline fishing in the AFZ: seabird mortality estimates and 1988-1997 trends. Wildlife Report 98/3, Parks and Wildlife Service, Tasmania.

EABG 1998. *Threat Abatement Plan for the incidental catch (or by-catch) of seabirds during oceanic longline fishing operations.* Environment Australia Biodiversity Group, Canberra.

Gärdenfors, U., Rodríguez, J.P., Hilton-Taylor, C., Hyslop, C., Mace, G., Molur, S. and Poss, S. 1999. Draft guidelines for the Application of IUCN Red List Criteria at National and Regional Levels. *Species* 31-32:58-70.

Jones, E. 1980. A survey of burrow-nesting petrels at Macquarie Island based upon remains left by predators. *Notornis* 27:11-20.

Jouventin, P, Stahl, J. C. Weimerskirch, H. and Mougín, J. L. 1984. The seabirds of the French subantarctic islands and Adelie Land, their status and conservation. Pp. 609-625 in *Status and Conservation of the World's Seabirds*. ICBP Tech. Publ. No. 2. J. P. Croxall, P. G. H. Evans and R. W. Schreiber (eds). ICBP, Cambridge, U.K.

Keith, K. and Hines, M. P. 1958. New and rare species of birds at Macquarie Island during 1956 and 1957. *CSIRO Wildl. Res.* 5:50-53.

Marchant, S. and Higgins, P. J. (eds) 1990. *The Handbook of Australian, New Zealand and Antarctic Birds*. Oxford University Press, Melbourne.

Rounsevell, D. E. and Brothers, N. P. 1984. The status of seabirds on Macquarie Island. Pp. 587-592 in *Status and Conservation of the World's Seabirds*. ICBP Tech. Publ. 2. J. P. Croxall, P. G. H. Evans and R. W. Schreiber (eds). ICBP, Cambridge, U.K.

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